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### REMARKS

Claims 1, 6-7, 10, 15-17 and 19-30 are all the claims presently pending in the application. Claims 1, 10, 21, and 25 are amended to more clearly define the invention. Claims 1, 10, 21, and 25 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicants also note that, notwithstanding any claim amendments herein or later during prosecution, Applicants' intent is to encompass equivalents of all claim elements.

Entry of this §1.116 Amendment is proper. Since the Amendments above narrow the issues for appeal and since such features and their distinctions over the prior art of record were discussed earlier, such amendments do not raise a new issue requiring a further search and/or consideration by the Examiner. As such, entry of this Amendment is believed proper and Applicants earnestly solicit entry. No new matter has been added.

Claims 1, 6-7, 10, 15-17 and 19-30 stand rejected under 35 U.S.C. § 102(a) as being unpatentable over the Noguchi reference in view of the Kanari et al. reference.

This rejection is respectfully traversed in the following discussion.

#### **I. THE CLAIMED INVENTION**

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 1, is directed to a mechanical pencil, that includes a barrel, a lead feeding

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mechanism disposed in the barrel to tighten and feed a lead, and a single-piece lead holder disposed between the lead feeding mechanism and a tip end of said barrel. The single-piece lead holder having a through hole through which the lead penetrates and includes holding portions, for holding the lead, a contact portion for contacting an inner peripheral surface of the barrel, and a body. The holding portions including a first holding portion at a front portion of the lead holder and a second holding portion at a rear portion of the lead holder. The holding portions fixing the lead relative to the barrel during writing and a maximum static friction force generated between the lead holder and an inner peripheral surface of the barrel is set to be larger than a maximum static friction force generated between the holding portions and the lead. In this manner, when a length of the lead becomes shorter than a distance between the lead feeding mechanism and the tip end of said barrel, the first holding portion holds the short lead and the second holding portion holds a next lead tightened by the lead feeding mechanism. The contact portion includes an outside cylinder provided concentrically on an outside of the body. The outside cylinder includes a rib projecting in an outside diameter direction to come into contact with the inner peripheral surface of the barrel. A slit is formed in a portion of the outside cylinder in which the rib of the outside cylinder is absent so that the rib is elastically displaceable radially outwardly into contact with the inner peripheral surface of the barrel.

Conventional mechanical pencils may include a lead holder that only includes one lead holding portion. However, with these conventional mechanical pencils when a length of the lead becomes shorter than a distance from the lead feeding mechanism and the tip end of the barrel, the lead is released from the lead feeding mechanism. As a result, the lead cannot be pushed out

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surely and the lead is not used efficiently and resources are wasted.

In stark contrast, the present invention includes a lead holder that includes holding portions in at least two places on the lead holder. With these two lead holding portions, the first holding portion holds the short lead and the second holding portion holds a next lead tightened by the lead feeding mechanism. In this manner, when the next lead is fed by the lead feeding mechanism, the next lead is surely fed by the holding portion provided at the rear of the lead holder, which, in turn, ensures that the next lead surely feeds out the first lead so that the first lead is sufficiently consumed. Thus, the length of the lead that is not used (remainder lead) is greatly reduced. (Page 2, line 20 - page 3, line 14).

## II. THE PRIOR ART REJECTION

The Examiner alleges that the Kanari et al. reference would have been combined with the Noguchi reference to form the claimed invention.

Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Clearly, none of the applied references teaches or suggests the features of the claimed invention including a mechanical pencil that includes a lead holder that has a first holding portion that holds a short lead while a second holding portion holds a next lead that is tightened by the lead feeding mechanism as recited by the independent claims.

As admitted by the Examiner, the Noguchi reference only discloses one of the

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conventional mechanical pencils including a lead holder that only includes one lead holding portion. Thus, when a length of the lead becomes shorter than a distance from the lead feeding mechanism and the tip end of the barrel, the lead is released from the lead feeding mechanism, thereby the lead cannot be fed out surely.

Thus, clearly, the Noguchi reference does not teach or suggest a lead holder that has a first holding portion that holds a short lead while a second holding portion holds a next lead that is tightened by the lead feeding mechanism as recited by the independent claims.

The Kanari et al reference does not remedy the deficiencies of the Noguchi reference.

In stark contrast, while the Kanari et al. reference discloses a holder that includes two holding portions as illustrated in Figure 3, when the lead becomes short, both the front holding portion and the rear holding portion hold the short lead. Therefore, the situation where the front holding portion holds the short lead and the rear holding portion holds a next lead never happens.

In other words, the Kanari et al. reference does not teach or suggest a lead holder that has a first holding portion that holds the short lead while a second holding portion holds a next lead that is tightened by the lead feeding mechanism as recited by the independent claims. The reason for it is as follows:

Supposing the lead feeding mechanism is knocked from the housed state that is illustrated by Figure 5 in the Kanari et al. reference, first the chuck 26 pushes the slider 44 and the lead-holding member 36 and the next lead pushes the short lead. In the state shown in Figure 5, sufficient friction force is generated between the slider 44 and the slider-resisting member 46 because the slider-resisting member 46 is placed in confronting relation to the pressing portion

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50 of the slider 44. When the slider 44 is advanced by the chuck 26, the slide-resisting member 46 is placed in confronting relation to the releasing portion 48 of the slider 44 so that less friction force is generated between the slider 4 and the slider-resisting member 46. In this situation, even if the next lead tries to go into the lead-holding member 36 with the next lead pushing the short lead forward, the short lead cannot move relative to the lead-holding member 36 and slider 44.

Rather, the short lead, the lead-holding member 36 and slider 44 advance as a whole together because, in stark contrast to the claimed invention, the friction between the releasing portion 48 of the slider 44 and the slider-resisting member 46 is smaller than the friction between the lead-holding member 36 and the lead.

In other words, the next lead cannot go into the lead-holding member 36 as long as the short lead is present in the lead-holding member 36. The only way for the next lead to advance is to pull the short lead from the lead-holding member 36 with a user's fingers and dispose of the short lead, and only then, can the next lead be advanced by the lead feeding mechanism.

In stark contrast, with the claimed invention, because the friction force between the lead holder and the barrel is larger than the friction force between the lead holder and the lead, when the next lead is just going into the lead holder, the short lead can be pushed and advanced relative to the lead holder by the next lead, and the next lead can be inserted into the lead holder and be held by the second holding portion. Thus, the situation wherein the first holding portion holds the short lead and the second holding portion holds a next lead as recited by the independent claims is realized.

Therefore, clearly none of the applied references teaches or suggests a lead holder that has

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a first holding portion that holds a short lead while a second holding portion holds a next lead that is tightened by the lead feeding mechanism as recited by the independent claims.

Further, Applicants submit that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Specifically, the Noguchi reference is directed to providing a mechanical pencil that reduces breakage of lead, reduces being stopped up with lead, of reliably guiding, holding and feeding the lead, and enabling writing for a long time without changing the grip on the mechanical pencil. (Col. 2, lines 21-28).

In stark contrast, the Kanari et al. reference is directed to the completely different and unrelated object of preventing a lead from retracting back into the slider after being fed forward. Although, the lead may retract back toward the mechanical pencil, the Kanari et al. reference prevents the lead from retracting back into the slider. (Col. 2, lines 20 - 33).

One of ordinary skill in the art who was concerned with providing a mechanical pencil that reduces breakage of lead, reduces being stopped up with lead, of reliably guiding, holding and feeding the lead, and enabling writing for a long time without changing the grip on the mechanical pencil as the Noguchi reference is concerned with providing would not have referred to the Kanari et al. reference (and vice-versa) because the Kanari et al. reference is directed to the completely different and unrelated object of preventing a lead from retracting back into the slider after being fed forward. Thus, the references would not have been combined.

Further, Applicants submit that the Examiner can point to no motivation or suggestion in

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the references to urge the combination as alleged by the Examiner.

The Examiner alleges that one of ordinary skill in the art would have been motivated at the time of the invention to modify the disclosure of the Noguchi reference to incorporate the two holding portions that are disclosed by the Kanari et al. reference "in order to simultaneously and firmly contact and frictionally hold both the lead being used for writing and the new following lead especially when the lead in use is shortened and abuts the new following lead."

However, Applicants respectfully submit that the Examiner has improperly engaged in the use of hindsight to provide such a motivation because none of the applied references disclose such a motivation. Rather, the only possible source for such a motivation is the present application.

Sections 2142 and 2143 of the MPEP both state:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings."

(Emphasis added).

"The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure." (Emphasis added, M.P.E.P. § 2143.01).

"There are three possible sources for a motivation to combine references; the nature of the problem to be solved, the teachings of the prior art, and the

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knowledge of persons of ordinary skill in the art." (Emphasis added, Id.).

The Office Action acknowledges that the Kanari et al. reference discloses "a lead holder 36 provided with holding portions 52 (note Fig. 3) at both the front and rear portions of the lead holder in order to contact and frictionally hold the lead 22 (note lines 48-51 in col. 4) especially when the remaining, i.e., in use, lead 22a is shortened and abuts the following, i.e., new, lead 22b while the remaining lead 22a protrudes and abuts the writing surface (note lines 13-16 in col. 5)." (Emphasis added).

In other words, the Kanari et al. reference explains that while the lead holder may include two lead holding portions, that these lead holding portions are only included to hold a single lead.

This is made very clear by the Kanari et al. reference: "When the preceding remaining lead portion 22a is no longer gripped by the collet chuck 26 and a following lead portion 22b is gripped by the collet chuck 26 as shown in Fig. 1. The remaining lead portion 22a is held by the lead-holding member 36 in such a state that the front end of the remaining lead portion 22a protrudes from the slider, and a space 47 is formed between the rear end of the remaining lead portion 22a and the following lead portion 22b in the zone corresponding to the return amount of the lead 22." (Col. 4, line 63 - col. 5, line 4).

Thus, the Kanari et al. reference very clearly explains and illustrates that the "remaining lead portion 22a is held by the [lead holding portions of the] lead-holding member 36" and that the "following lead portion 22b is gripped by the collet chuck 26." (Id.).

Therefore, contrary to the Examiner's allegation, the Kanari et al. reference clearly does not teach or suggest that the holding portions of the lead holding member are provided to



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“simultaneously and firmly contact and frictionally hold both the lead being used for writing and the new following lead.”

Rather, and in stark contrast, the Kanari et al. reference only discloses that the lead holding portions of the lead holder hold the lead being consumed and that the collet chuck holds the new following lead.

Clearly, the applied references do not serve as a “possible source” for the alleged motivation (M.P.E.P. § 2143.01).

It is also clear that the “nature of the problem to be solved” (M.P.E.P. § 2143.01) also does not serve as a source for the alleged motivation. Indeed, neither of the applied references mention anything at all that is even remotely related to the problem that is solved by the present application of reducing the length of the remainder lead.

Thus, the Examiner has not only failed to provide a prima facie case of obviousness by failing to apply a reference that discloses the features of the claimed invention, but also failed to provide a teaching or suggestion to make the Examiner’s alleged modification that is “in the prior art, not in applicant’s disclosure” (M.P.E.P. § 2143.01).

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 1, 6-7, 10, 15-17, and 19-30.

### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1, 6-7, 10, 15-17, and 19-30, all the claims presently pending in the Application, are

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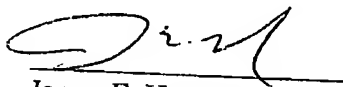
patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 11/3/04

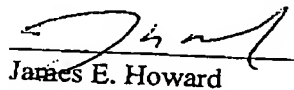


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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment by facsimile with the United States Patent and Trademark Office to Examiner Kathleen J. Prunner, Group Art Unit 3751 at fax number (703) 872-9306 this 3<sup>rd</sup> day of November, 2004.



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